

**§ 22.919 Electronic serial numbers.**

The Electronic Serial Number (ESN) is a 32 bit binary number that uniquely identifies a cellular mobile transmitter to any cellular system.

(a) Each mobile transmitter in service must have a unique ESN.

(b) The ESN host component must be permanently attached to a main circuit board of the mobile transmitter and the integrity of the unit's operating software must not be alterable. The ESN must be isolated from fraudulent contact and tampering. If the ESN host component does not contain other information, that component must not be removable, and its electrical connections must not be accessible. If the ESN host component contains other information, the ESN must be encoded using one or more of the following techniques:

- (1) Multiplication or division by a polynomial;
- (2) Cyclic coding;
- (3) The spreading of ESN bits over various non-sequential memory locations.

(c) The ESN must be factory set and must not be alterable, transferable, removable or otherwise able to be manipulated. Cellular mobile equipment must be designed such that any attempt to remove, tamper with, or change the ESN chip, its logic system, or firmware originally programmed by the manufacturer will render the mobile transmitter inoperative.

**§ 22.923 Cellular system configuration.**

Mobile stations communicate with and through base transmitters only. Base transmitters communicate with mobile stations directly or through cellular repeaters. Auxiliary test stations may communicate with base or mobile stations for the purpose of testing equipment.

**§ 22.925 Prohibition on airborne operation of cellular telephones.**

Cellular telephones installed in or carried aboard airplanes, balloons or any other type of aircraft must not be operated while such aircraft are airborne (not touching the ground). When any aircraft leaves the ground, all cellular telephones on board that aircraft must be turned off. The following no-

tice must be posted on or near each cellular telephone installed in any aircraft:

"The use of cellular telephones while this aircraft is airborne is prohibited by FCC rules, and the violation of this rule could result in suspension of service and/or a fine. The use of cellular telephones while this aircraft is on the ground is subject to FAA regulations."

**§ 22.927 Responsibility for mobile stations.**

Mobile stations that are subscribers in good standing to a cellular system, when receiving service from that cellular system, are considered to be operating under the authorization of that cellular system. Cellular system licensees are responsible for exercising effective operational control over mobile stations receiving service through their cellular systems. Mobile stations that are subscribers in good standing to a cellular system, while receiving service from a different cellular system, are considered to be operating under the authorization of such different system. The licensee of such different system is responsible, during such temporary period, for exercising effective operational control over such mobile stations as if they were subscribers to it.

**§ 22.929 Application requirements for the Cellular Radiotelephone Service.**

In addition to information required by subparts B and D of this part, applications for authorization in the Cellular Radiotelephone Service must contain the applicable supplementary information described in this section. Initial applications for new cellular systems must also comply with § 22.953.

(a) *Administrative information.* The following information is required either by FCC Form 600, Schedule C, or as an exhibit.

(1) The number of transmitter sites for which authorization is requested;

(2) The call sign(s) of other facilities in the same area that are ultimately controlled by the real party in interest to the application;

(3) If the application involves a service area boundary (SAB) extension (see § 22.912), a statement as to whether the